10/763,088

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=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   161.82     334.13

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -21.06     -21.06

FILE 'REGISTRY' ENTERED AT 14:04:36 ON 14 SEP 2007
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DICTIONARY FILE UPDATES:  13 SEP 2007  HIGHEST RN 947061-18-9

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  Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

*** YOU HAVE NEW MAIL ***

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.45     334.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00     -21.06

FILE 'REGISTRY' ENTERED AT 14:04:45 ON 14 SEP 2007
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STRUCTURE FILE UPDATES:   13 SEP 2007  HIGHEST RN 947061-18-9
DICTIONARY FILE UPDATES:  13 SEP 2007  HIGHEST RN 947061-18-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.
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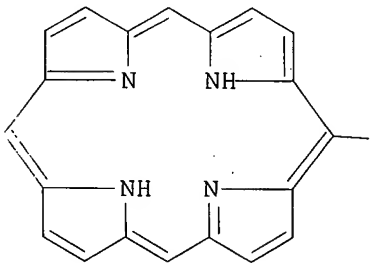
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading c:\program files\stnexp\queries\10763088.2

L7 STRUCTURE UPLOADED

=> d l7
L7 HAS NO ANSWERS
L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l7 full
FULL SEARCH INITIATED 14:05:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 101309 TO ITERATE

100.0% PROCESSED 101309 ITERATIONS 1992 ANSWERS
SEARCH TIME: 00.00.02

L8 1992 SEA SSS FUL L7

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.10	506.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-21.06

FILE 'CAPLUS' ENTERED AT 14:05:28 ON 14 SEP 2007

FILE COVERS 1907 - 14 Sep 2007 VOL 147 ISS 13
FILE LAST UPDATED: 13 Sep 2007 (20070913/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

*** YOU HAVE NEW MAIL ***

=> s ;8
ENTER LOGIC EXPRESSION, QUERY NAME, OR (END):end
SEARCH ENDED BY USER

8 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l8
L9   936 L8

=> s l9 and non metallic
         903161 NON
         279763 METALLIC
           4545 NON METALLIC
                (NON(W)METALLIC)
L10   0 L9 AND NON METALLIC

=> s l9 and label?
         455850 LABEL?
L11   8 L9 AND LABEL?

=> dup rem l11
PROCESSING COMPLETED FOR L11
L12   8 DUP REM L11 (0 DUPLICATES REMOVED)

=> d l12 bib abs hitstr 1-8

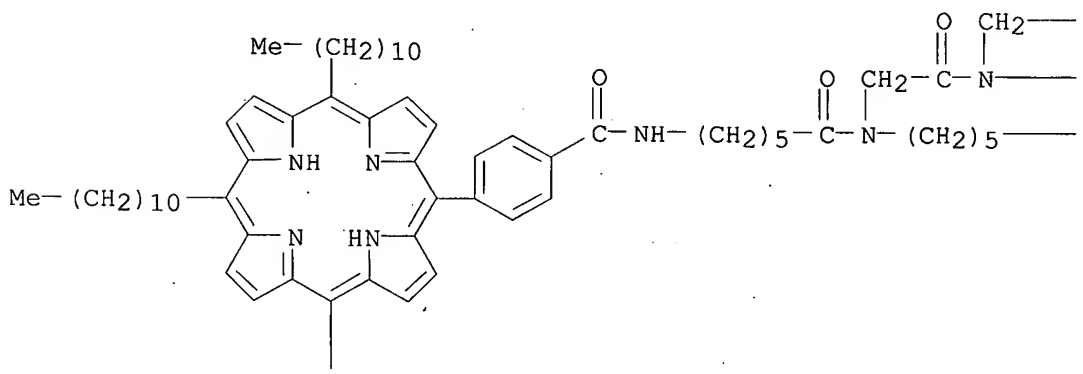
L12 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN   2007:216781 CAPLUS
DN   146:447865
TI   Solid-Phase Synthesis, Bioconjugation, and Toxicology of Novel Cationic
     Oligopeptoids for Cellular Drug Delivery
AU   Schroeder, Tina; Schmitz, Katja; Niemeier, Nicole; Balaban, Teodor S.;
     Krug, Harald F.; Schepers, Ute; Braese, Stefan
CS   Institut fuer Organische Chemie and Center for Functional Nanostructures
     (CFN), Universitaet Karlsruhe (TH), Karlsruhe, D-76131, Germany
SO   Bioconjugate Chemistry (2007), 18(2), 342-354
     CODEN: BCCHES; ISSN: 1043-1802
PB   American Chemical Society
DT   Journal
LA   English
AB   For many therapeutic applications, it has become more and more important
     to find synthetic compds. that have the ability to transport a variety of
     drugs and cargo mols. into cells and tissues. Like arginine-rich
     cell-penetrating peptides (CPPs), it is already known that peptide
     mimetics such as β-peptides and peptoids can also express a transport
     function. In this study, ten fluorophore-labeled chiral and
     achiral peptoids with different backbone lengths and side chains as well
     as three peptoids coupled to a therapeutically active porphyrin moiety
     were prepared using a highly modular solid-phase synthesis (SPP) approach.
     To compare the structural determinants with the cellular uptake

efficiency, all peptoids were analyzed by live cell imaging. All cells show an even vesicular distribution of the internalized peptoids, also revealing that a vesicular escape into the cytosol was stronger for peptoids with longer backbones. Moreover, the uptake efficiency correlated with both the incubation time and the given concentration Toxicol. tests and uptake expts. with porphyrin-coupled peptoids indicate their suitability for application as robust and readily available drug delivery systems or intracellular probes.

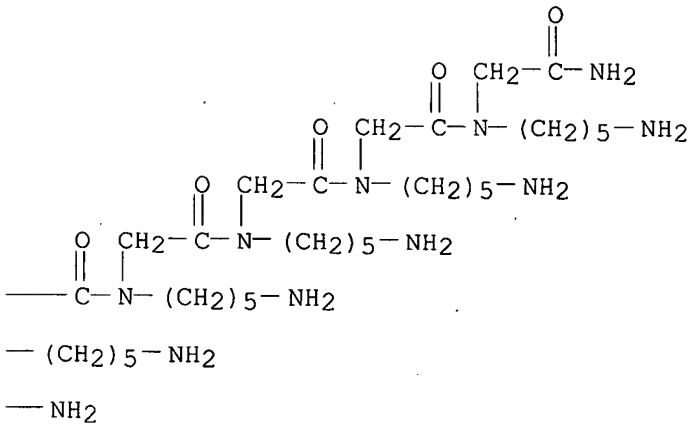
IT 934752-30-4P 934752-31-5P 934752-32-6P
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(solid-phase synthesis, bioconjugation, and toxicol. of novel cationic oligopeptoids for cellular drug delivery)

RN 934752-30-4 CAPLUS

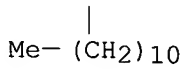
CN Glycinamide, N-(5-aminopentyl)-N-[1-oxo-6-[[4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)benzoyl]amino]hexyl]glycyl-N-(5-aminopentyl)glycyl-N-(5-aminopentyl)glycyl-N-(5-aminopentyl)glycyl-N-(5-aminopentyl)glycyl-N2-(5-aminopentyl)- (CA INDEX NAME)



PAGE 1-B

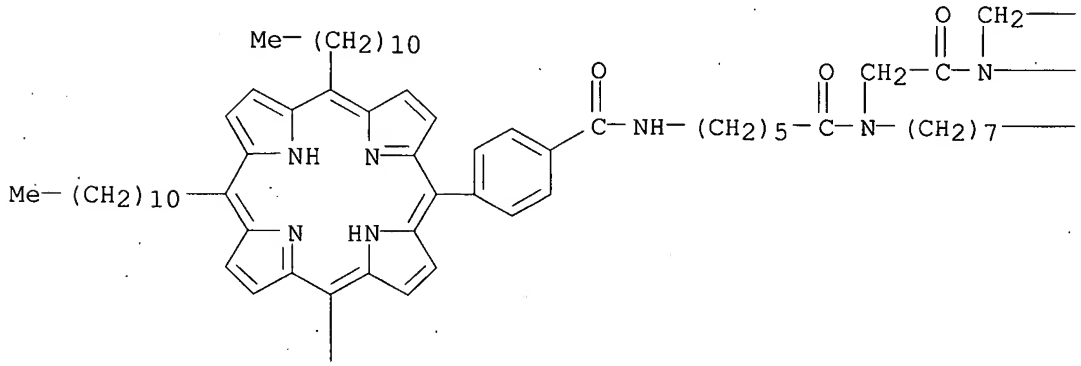


PAGE 2-A



RN 934752-31-5 CAPLUS
CN Glycinamide, N-(7-aminoheptyl)-N-[1-oxo-6-[[4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)benzoyl]amino]hexyl]glycyl-N-(7-aminoheptyl)glycyl-N-(7-aminoheptyl)glycyl-N-(7-aminoheptyl)glycyl-N-(7-aminoheptyl)glycyl-N2-(7-aminoheptyl)- (CA INDEX NAME)

PAGE 1-A



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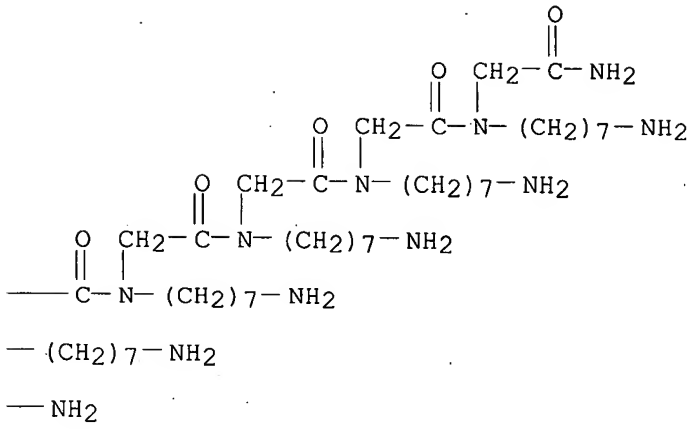
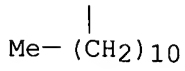
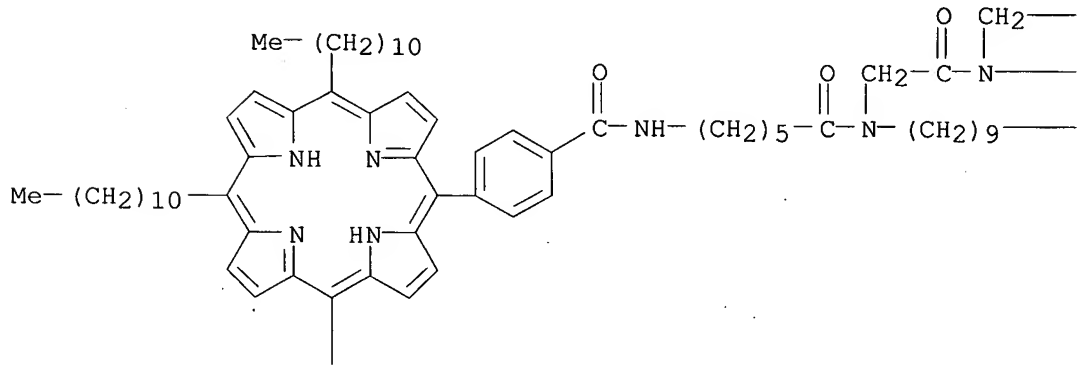


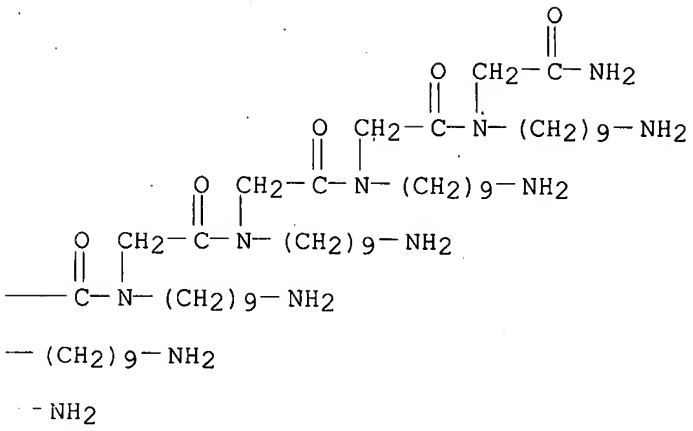
PAGE 2-A

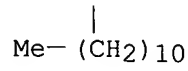


RN 934752-32-6 CAPLUS
CN Glycinamide, N-(9-aminononyl)-N-[1-oxo-6-[[4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)benzoyl]amino]hexyl]glycyl-N-(9-aminononyl)glycyl-N-(9-aminononyl)glycyl-N-(9-aminononyl)glycyl-N-(9-aminononyl)glycyl-N2-(9-aminononyl)- (CA INDEX NAME)

PAGE 1-A



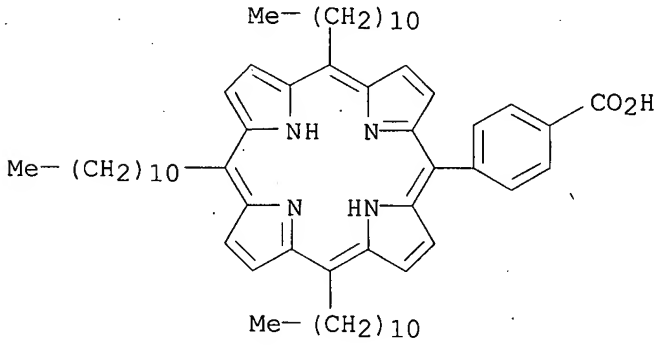




IT 511256-09-0P 934752-59-7DP, resin bound
934752-60-0DP, resin bound 934752-61-1DP, resin bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(solid-phase synthesis, bioconjugation, and toxicol. of novel cationic oligopeptoids for cellular drug delivery)

RN 511256-09-0 CAPLUS

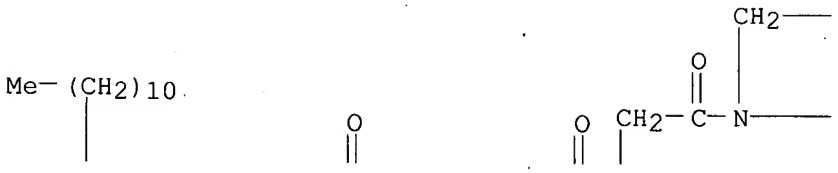
CN Benzoic acid, 4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)- (CA INDEX NAME)



RN 934752-59-7 CAPLUS

CN Glycinamide, N-[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]-N-[1-oxo-6-[[4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)benzoyl]amino]hexyl]glycyl-N-[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]glycyl-N-[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]glycyl-N-[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]glycyl-N-[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]glycyl-N2-[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]- (CA INDEX NAME)

PAGE 1-A



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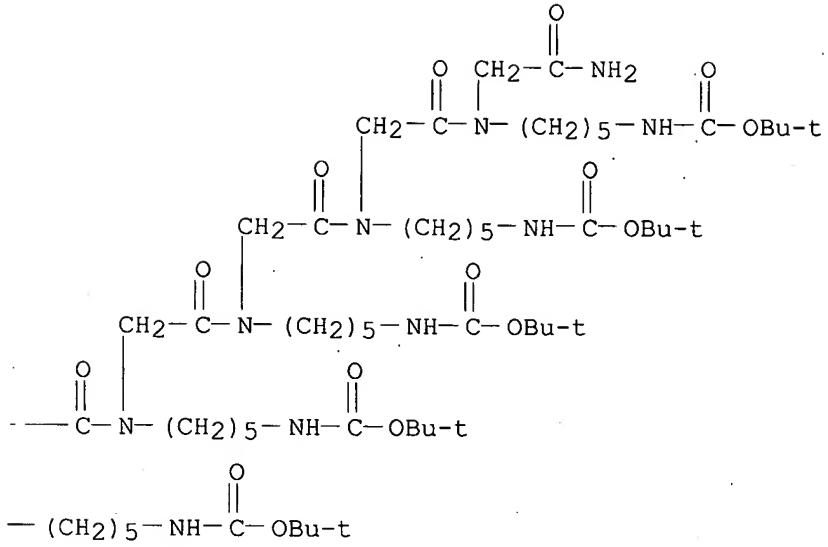

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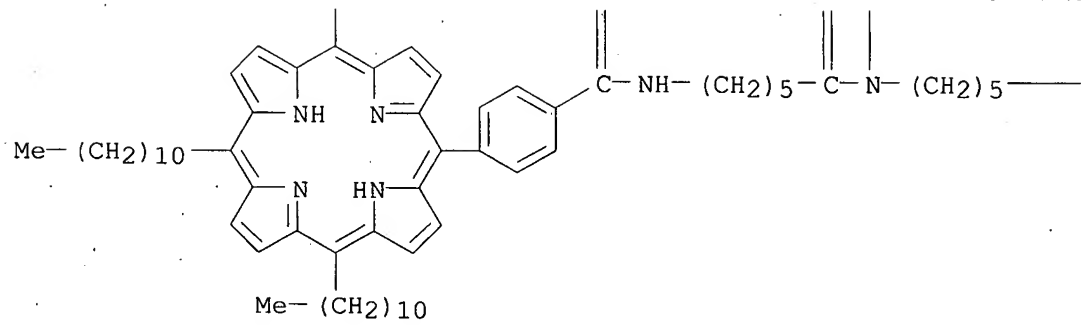

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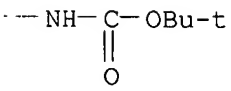
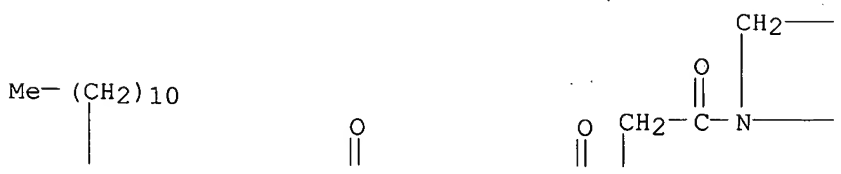


RN 934752-60-0 CAPLUS
CN Glycinamide, N-[7-[[(1,1-dimethylethoxy)carbonyl]amino]heptyl]-N-[1-oxo-6-[[4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)benzoyl]amino]hexyl]glycyl-N-[7-[[(1,1-dimethylethoxy)carbonyl]amino]heptyl]glycyl-N-[7-[[(1,1-dimethylethoxy)carbonyl]amino]heptyl]glycyl-N-[7-[[(1,1-dimethylethoxy)carbonyl]amino]heptyl]glycyl-N-[7-[[(1,1-dimethylethoxy)carbonyl]amino]heptyl]glycyl-N2-[7-[[(1,1-dimethylethoxy)carbonyl]amino]heptyl]- (CA INDEX NAME)

PAGE 1-A



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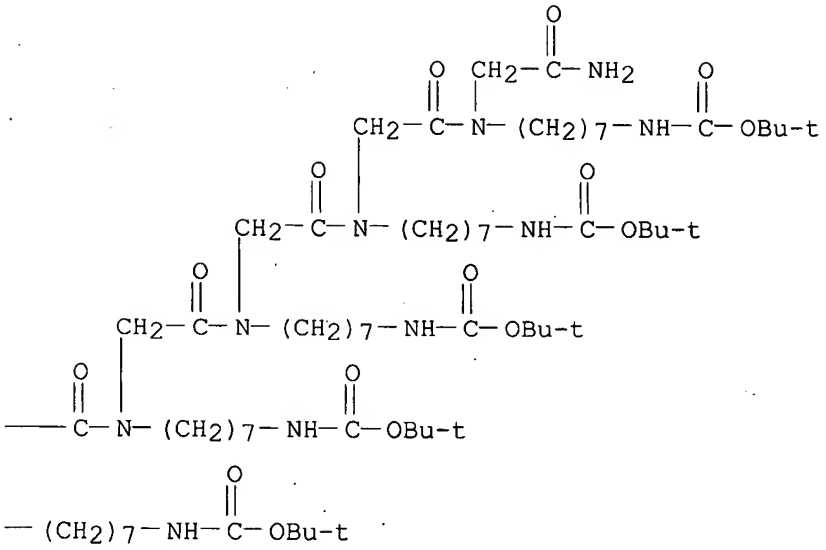

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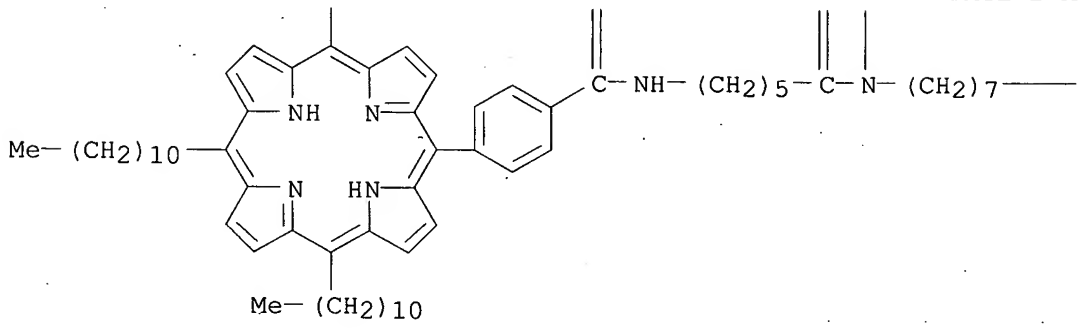

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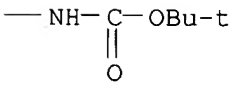
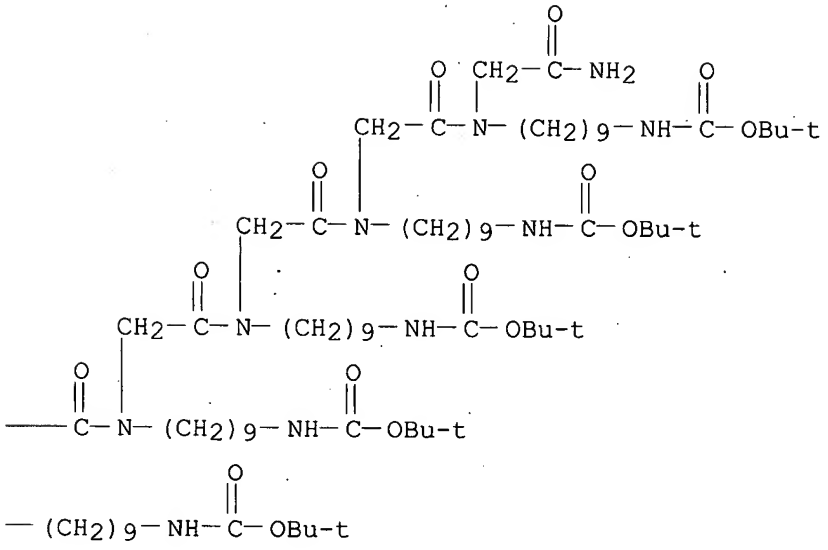


RN 934752-61-1 CAPLUS

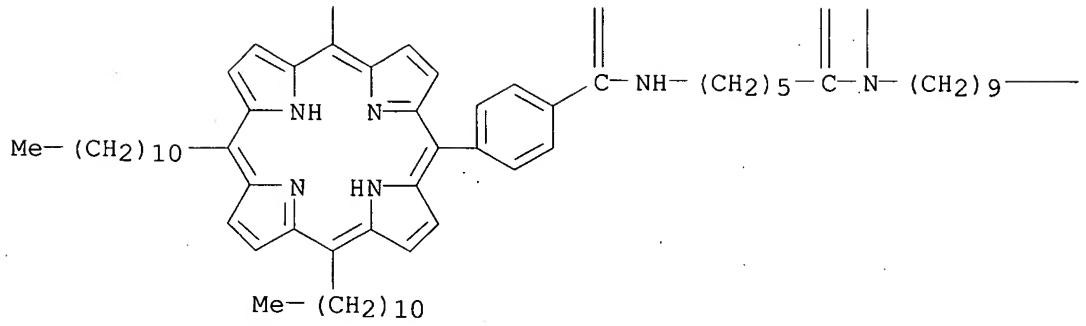
CN Glycinamide, N-[9-[[(1,1-dimethylethoxy)carbonyl]amino]nonyl]-N-[1-oxo-6-[[4-(10,15,20-triundecyl-21H,23H-porphin-5-yl)benzoyl]amino]hexyl]glycyl-N-[9-[[(1,1-dimethylethoxy)carbonyl]amino]nonyl]glycyl-N-[9-[[(1,1-dimethylethoxy)carbonyl]amino]nonyl]glycyl-N-[9-[[(1,1-dimethylethoxy)carbonyl]amino]nonyl]glycyl-N-[9-[[(1,1-dimethylethoxy)carbonyl]amino]nonyl]glycyl-N2-[9-[[(1,1-dimethylethoxy)carbonyl]amino]nonyl]- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B



PAGE 2-A



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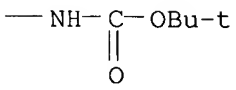


RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

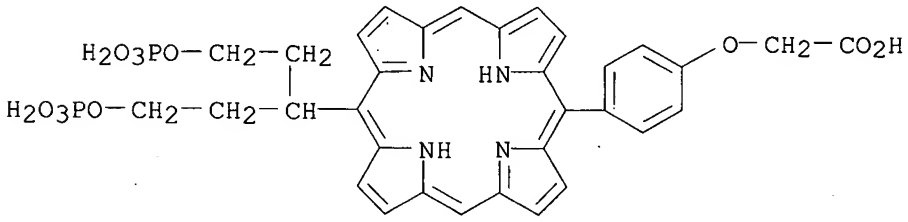
L12 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:386015 CAPLUS
DN 145:79107
TI Bioconjugatable Porphyrins Bearing a Compact Swallowtail Motif for Water Solubility
AU Borbas, K. Eszter; Mroz, Pawel; Hamblin, Michael R.; Lindsey, Jonathan S.
CS Department of Chemistry, North Carolina State University, Raleigh, NC, 27695-8204, USA
SO Bioconjugate Chemistry (2006), 17(3), 638-653
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
OS CASREACT 145:79107
AB A broad range of applications requires access to water-soluble, bioconjugatable porphyrins. Branched alkyl groups attached at the branching site to the porphyrin meso position are known to impart high organic solubility Such "swallowtail" motifs bearing a polar group (hydroxy, dihydroxyphosphoryl, dihydroxyphosphoryloxy) at the terminus of each branch have now been incorporated at a meso site in trans-AB-porphyrins. The incorporation of the swallowtail motif relies on rational synthetic methods whereby a 1,9-bis(N-propylimino)dipyrromethane (bearing a bioconjugatable tether at the 5-position) is condensed with a dipyrromethane (bearing a protected 1,5-dihydroxypent-3-yl unit at the 5-position). The two hydroxy groups in the swallowtail motif of each of the resulting zinc porphyrins can be transformed to the corresponding diphosphate or diphosphonate product. A 4-(carboxymethyloxy)phenyl group provides the bioconjugatable tether. The six such porphyrins reported here are highly water-soluble (≥20 mM at room temperature in water at pH 7) as determined by visual inspection, UV-vis absorption spectroscopy, or 1H NMR spectroscopy. Covalent attachment was carried out in aqueous solution with the unprotected porphyrin diphosphonate and a monoclonal antibody against the T-cell receptor CD3ε. The resulting conjugate performed comparably to a com. available fluorescein isothiocyanate-labeled antibody with Jurkat cells in flow cytometry and fluorescence microscopy assays. Taken together, this work enables preparation of useful quantities of water-soluble, bioconjugatable porphyrins in a compact architecture for

applications in the life sciences.

IT 892872-19-4P 892872-20-7P 892872-26-3P
892872-27-4P 892872-28-5P
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bioconjugatable porphyrins bearing compact swallowtail motif for water solubility)

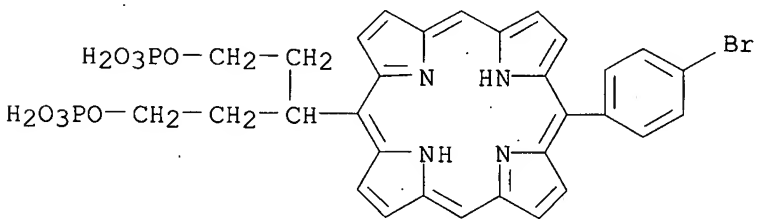
RN 892872-19-4 CAPLUS

CN Acetic acid, [4-[15-[3-(phosphonooxy)-1-[2-(phosphonooxy)ethyl]propyl]-21H,23H-porphin-5-yl]phenoxy]- (9CI) (CA INDEX NAME)



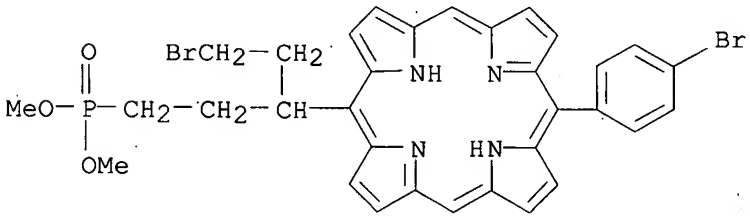
RN 892872-20-7 CAPLUS

CN 1,5-Pentanediol, 3-[15-(4-bromophenyl)-21H,23H-porphin-5-yl]-, bis(dihydrogen phosphate) (ester) (9CI) (CA INDEX NAME)



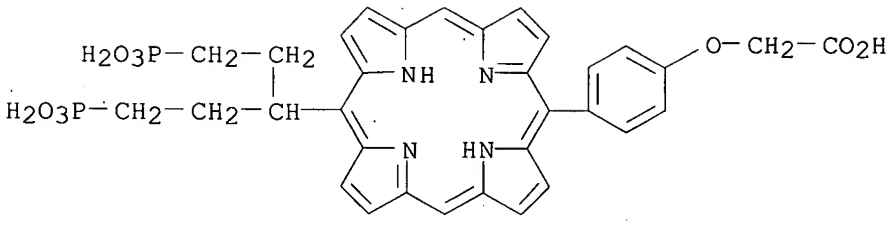
RN 892872-26-3 CAPLUS

CN Phosphonic acid, [5-bromo-3-[15-(4-bromophenyl)-21H,23H-porphin-5-yl]pentyl]-, dimethyl ester (9CI) (CA INDEX NAME)

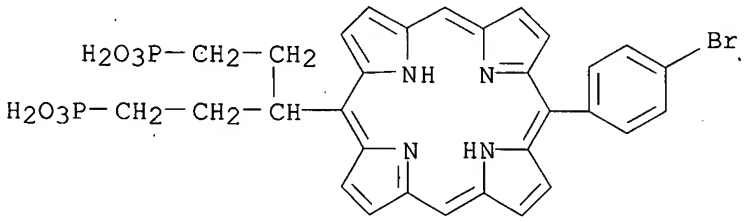


RN 892872-27-4 CAPLUS

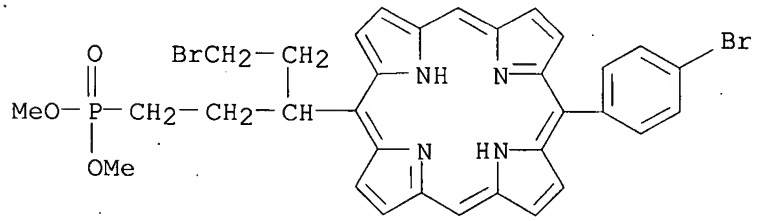
CN Acetic acid, [4-[15-[3-phosphono-1-(2-phosphonoethyl)propyl]-21H,23H-porphin-5-yl]phenoxy]- (9CI) (CA INDEX NAME)



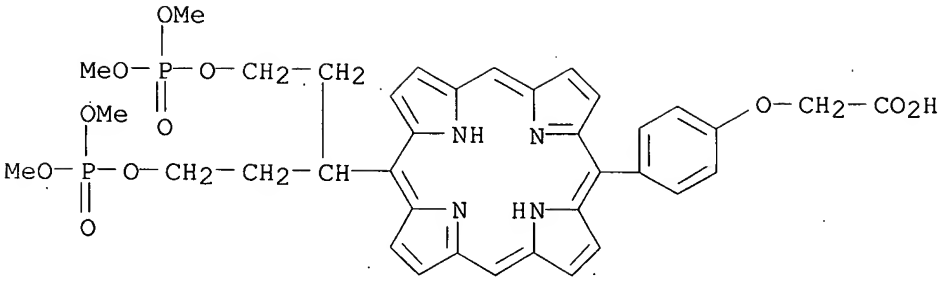
RN 892872-28-5 CAPLUS
CN Phosphonic acid, [3-[15-(4-bromophenyl)-21H,23H-porphin-5-yl]-1,5-pentanediyl]bis- (9CI) (CA INDEX NAME)



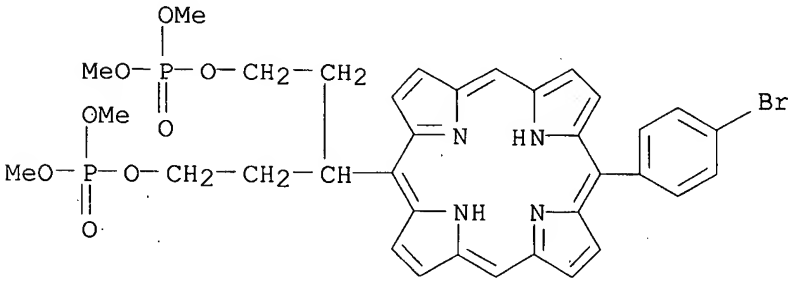
IT 892872-26-3DP, anti-CD3ε antibody conjugates
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bioconjugatable porphyrins bearing compact swallowtail motif for water solubility)
RN 892872-26-3 CAPLUS
CN Phosphonic acid, [5-bromo-3-[15-(4-bromophenyl)-21H,23H-porphin-5-yl]pentyl]-, dimethyl ester (9CI) (CA INDEX NAME)



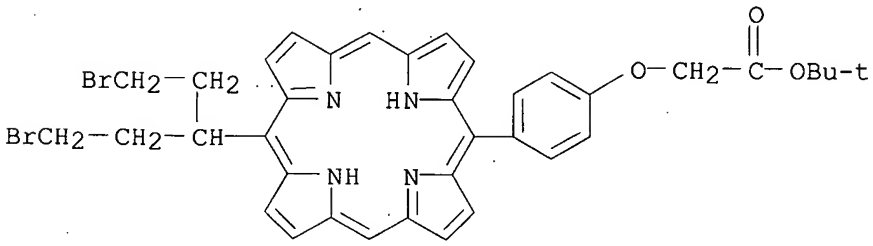
IT 892872-17-2P 892872-18-3P 892872-21-8P
892872-22-9P 892872-23-0P 892872-24-1P
892872-25-2P 892872-29-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(bioconjugatable porphyrins bearing compact swallowtail motif for water solubility)
RN 892872-17-2 CAPLUS
CN Acetic acid, [4-[15-[3-[(dimethoxyphosphinyl)oxy]-1-[2-[(dimethoxyphosphinyl)oxy]ethyl]propyl]-21H,23H-porphin-5-yl]phenoxy]- (9CI) (CA INDEX NAME)



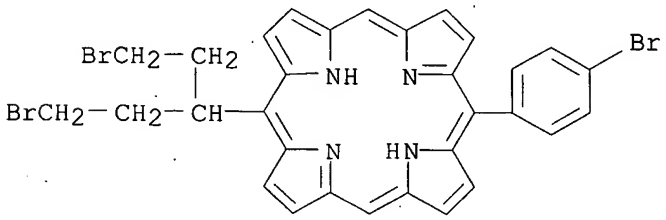
RN 892872-18-3 CAPLUS
CN Phosphoric acid, 3-[15-(4-bromophenyl)-21H,23H-porphin-5-yl]-1,5-pentanediyl tetramethyl ester (9CI) (CA INDEX NAME)



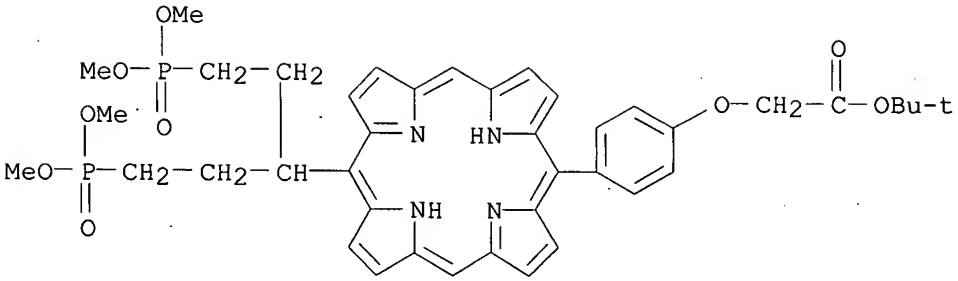
RN 892872-21-8 CAPLUS
CN Acetic acid, [4-[15-[3-bromo-1-(2-bromoethyl)propyl]-21H,23H-porphin-5-yl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



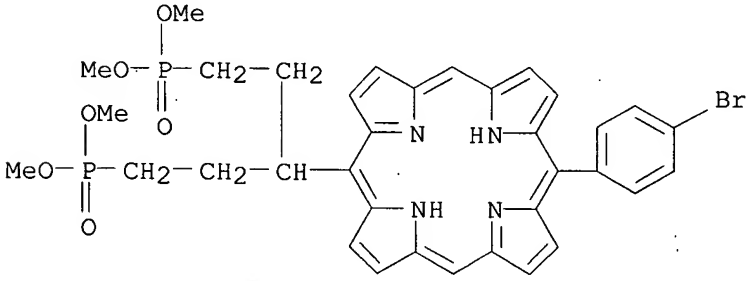
RN 892872-22-9 CAPLUS
CN 21H,23H-Porphine, 5-[3-bromo-1-(2-bromoethyl)propyl]-15-(4-bromophenyl)- (CA INDEX NAME)



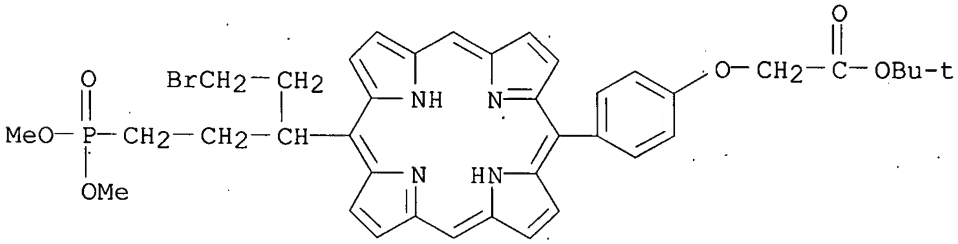
RN 892872-23-0 CAPLUS
CN Acetic acid, [4-[15-[3-(dimethoxyphosphinyl)-1-[2-(dimethoxyphosphinyl)ethyl]propyl]-21H,23H-porphin-5-yl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 892872-24-1 CAPLUS
CN Phosphonic acid, [3-[15-(4-bromophenyl)-21H,23H-porphin-5-yl]-1,5-pentanediyl]bis-, tetramethyl ester (9CI) (CA INDEX NAME)

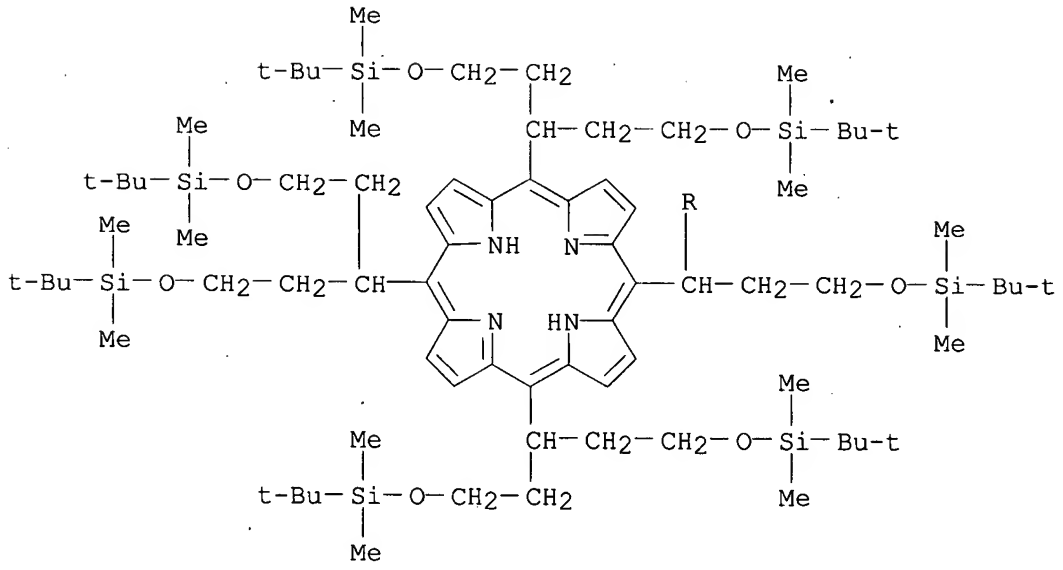


RN 892872-25-2 CAPLUS
CN Acetic acid, [4-[15-[3-bromo-1-[2-(dimethoxyphosphinyl)ethyl]propyl]-21H,23H-porphin-5-yl]phenoxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

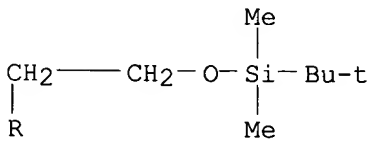


RN 892872-29-6 CAPLUS
CN 21H,23H-Porphine, 5,10,15,20-tetrakis[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-[2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]propyl]- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:242784 CAPLUS
DN 138:401526
TI Resonance Raman and DFT Studies of Tetra-tert-butyl Porphine: Assignment of Strongly Enhanced Distortion Modes in a Ruffled Porphyrin
AU Oakes, Roma E.; Spence, Stephen J.; Bell, Steven E. J.
CS School of Chemistry, Queen's University, Belfast, BT9 5AG, UK
SO Journal of Physical Chemistry A (2003), 107(16), 2964-2973
CODEN: JPCAFH; ISSN: 1089-5639
PB American Chemical Society
DT Journal
LA English
AB The free-base form of tetra-tert-Bu porphine (TtBP), which has extremely bulky meso substituents, is severely distorted from planarity, with a ruffling angle of 65.5°. The resonance Raman spectrum of TtBP (λex = 457.9 nm) and its d2, d8, and d10 isotopomers have been recorded, and while the spectra show high-frequency bands similar to those observed for planar meso-substituted porphyrins, there are several addnl. intense bands in the low-frequency region. D. functional calcns. at the B3-LYP/6-31G(d) level were carried out for all four isotopomers, and calculated frequencies were scaled using a single factor of 0.98. The single factor scaling approach was validated on free base porphine where the RMS error was found to be 14.9 cm-1. All the assigned bands in the high-frequency (>1000 cm-1) region of TtBP were found to be due to vibrations similar in character to the in-plane skeletal modes of conventional planar porphyrins. In the low-frequency region, two of the bands, assigned as ν8 (ca. 330 cm-1) and ν16 (ca. 540 cm-1), are

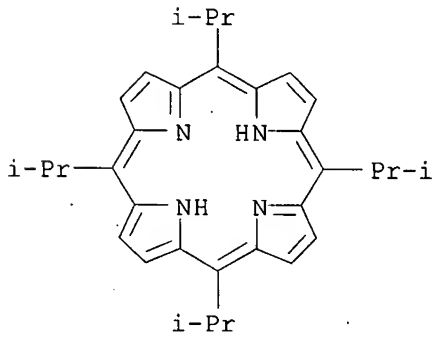
also found in planar porphyrins such as tetra-Ph porphine (TPP) and tetra-iso-Pr porphine (IPP). Of the remaining three very strong bands, the lowest frequency band was assigned as γ12 (pyr swivel, observed 415 cm-1, calculated 407 cm-1 in d0). The next band, observed at 589 cm-1 in the d0

compound (calculated 583 cm-1), was assigned as a mode whose composition is a mixture

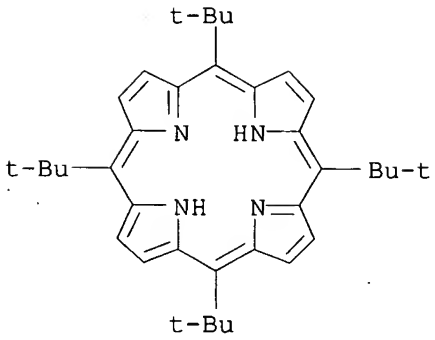
of modes that were previously labeled γ13 (γ(CmCaHmCa)) and γ11 (pyr foldasym) in NiOEP. The final strong band, observed at 744 cm-1 (calculated 746 cm-1), was assigned to a mode whose composition is again a mixture of γ11and γ13, although here it is γ11 rather than γ13 which predominates. These bands have characters and positions similar to those of three of the four porphyrin ring-based, weak bands that have previously been observed for NiTPP. In addition there are several weaker bands in the TtBP spectra that are also "out-of-plane" vibrations. Two of these (878 and 902 cm-1) correspond to the remaining 652 cm-1 NiTPP band, γ17 (γ(Cβ-H)sym), and are γ(Cβ-H)sym vibrations centered predominantly on the pyrrolidine or pyrrole rings. Since the intensities of resonance Raman bands can be used to map the changes in geometry associated with the electronic transitions lying at the excitation wavelength, the observation that the modes which are most strongly enhanced are those which involve distortion of the Cm-pyrrole-Cm segments away from their near-planar ground-state geometries may be significant. In particular, it points to distortions in the excited state along coordinates which are different to those found in the ground state. In the ground state, each of the Cm-pyrrole-Cm units in TtBP is near-planar, even in this very sterically challenged compound, but the overall structure is ruffled because these units are tilted with respect to each other. However, the enhanced modes do not follow this distortion coordinate but are associated with twisting within the Cm-pyrrole-Cm units and this suggests that these modes are important in the excited state.

IT 98630-03-6 163630-00-0, Tetra-tert-butylporphine
RL: PRP (Properties)
(resonance Raman and DFT calcns. of tetra-tert-butylporphine)

RN 98630-03-6 CAPLUS
CN 21H,23H-Porphine, 5,10,15,20-tetrakis(1-methylethyl)- (9CI) (CA INDEX NAME)



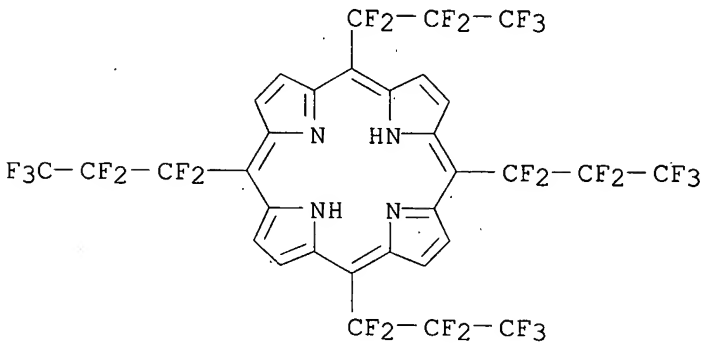
RN 163630-00-0 CAPLUS
CN 21H,23H-Porphine, 5,10,15,20-tetrakis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

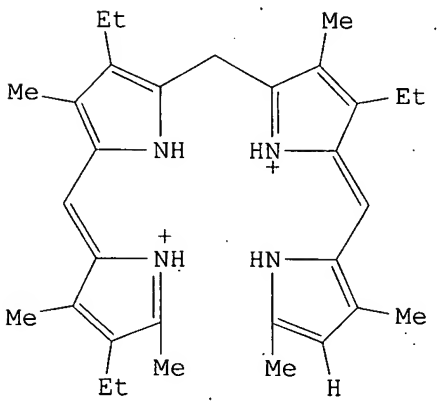
L12 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:417208 CAPLUS
DN 133:213839
TI Mechanistic Studies of (Porphinato)Iron-Catalyzed Isobutane Oxidation. Comparative Studies of Three Classes of Electron-Deficient Porphyrin Catalysts
AU Moore, Kevin T.; Horvath, Istvan T.; Therien, Michael J.
CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA
SO Inorganic Chemistry (2000), 39(15), 3125-3139
CODEN: INOCAJ; ISSN: 0020-1669
PB American Chemical Society
DT Journal
LA English
AB We report herein a comprehensive study of (porphinato)iron [PFe]-catalyzed isobutane oxidation in which mol. oxygen is utilized as the sole oxidant; these catalytic reactions were carried out and monitored in both autoclave reactors and sapphire NMR tubes. In situ 19F and 13C NMR expts., coupled with GC analyses and optical spectra obtained from the autoclave reactions have enabled the identification of the predominant porphyrinic species present during PFe-catalyzed oxidation of isobutane. Electron-deficient PFe catalysts based on 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin [(C6F5)4PH2], 2,3,7,8,12,13,17,18-octabromo-5,10,15,20-tetrakis(pentafluorophenyl)porphyrin [Br8(C6F5)4PH2], and 5,10,15,20-tetrakis(heptafluoropropyl)porphyrin [(C3F7)4PH2] macrocycles were examined The nature and distribution of hydrocarbon oxidation products show that an autoxidn. reaction pathway dominates the reaction kinetics, consistent with a radical chain process. For each catalytic system examined, PFeII species were shown not to be stable under moderate O2 pressure at 80 °C; in every case, the PFeII catalyst precursor was converted quant. to high-spin PFeIII complexes prior to the observation of any hydrocarbon oxidation products. Once catalytic isobutane oxidation is initiated, all reactions are marked by concomitant decomposition of the porphyrin-based catalyst. In situ 17O NMR spectroscopic studies confirm the incorporation of 17O from labeled water into the oxidation products, implicating the involvement of PFe-OH in the catalytic cycle. Importantly, Br8(C6F5)4PFe-based catalysts, which lack macrocycle C-H bonds, do not exhibit augmented stability with respect to analogous catalysts based on (C6F5)4PFe and (C3F7)4PFe species. The data presented are consistent with a hydrocarbon oxidation process in which PFe complexes play dual roles of radical chain initiator, and the species responsible for the catalytic decomposition of organic peroxides. This modified Haber-Weiss reaction scheme provides for the decomposition of tert-Bu hydroperoxide intermediates via reaction with PFe-OH complexes; the PFeIII species responsible for hydroperoxide decomposition are regenerated by reaction of PFeII with dioxygen under these exptl. conditions.

IT 159355-61-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(studies of (porphinato)iron-catalyzed isobutane oxidation)
RN 159355-61-0 CAPLUS
CN 21H,23H-Porphine, 5,10,15,20-tetrakis(heptafluoropropyl)- (9CI) (CA INDEX NAME)



RE.CNT 94 THERE ARE 94 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1985:470713 CAPLUS
DN 103:70713
TI Novel porphyrins from copper(II)-mediated cyclizations of 1',8'-dimethyl-A,C-biladiene salts: mechanism of the cyclization reaction
AU Smith, Kevin M.; Minnetian, Ohannes M.
CS Dep. Chem., Univ. California, Davis, CA, 95616, USA
SO Journal of Organic Chemistry (1985), 50(12), 2073-80
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
OS CASREACT 103:70713
GI



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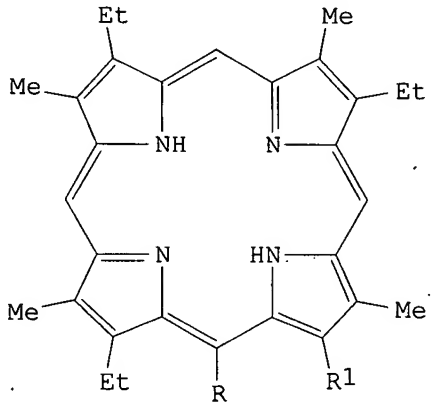


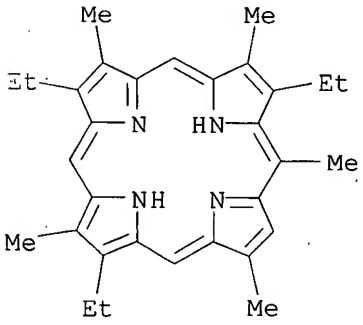
II

AB Cu(II)-mediated cyclizations of biladiene I under different conditions gave porphyrins II (R = H, Me, Me2N, Et2N, CHO, R1 = H; R = H, R1 = CHO). I labeled with 13C in the terminal Me groups was used to establish the origins of γ-C and its substituents, and mechanisms were proposed.
IT 94098-79-0P 96246-91-2P 96246-92-3P
96246-93-4P 96246-98-9P 96246-99-0P

96247-00-6P 96247-01-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

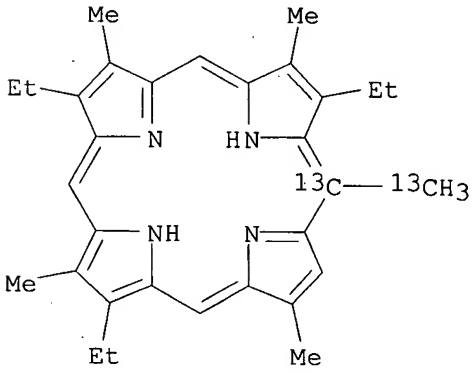
RN 94098-79-0 CAPLUS

CN 21H,23H-Porphine, 3,12,17-triethyl-2,5,8,13,18-pentamethyl- (9CI) (CA INDEX NAME)



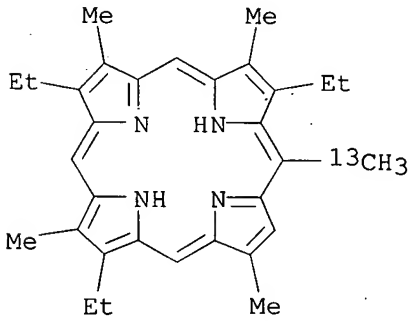
RN 96246-91-2 CAPLUS

CN 21H,23H-Porphine-5-13C, 3,12,17-triethyl-2,8,13,18-tetramethyl-5-(methyl-13C)- (9CI) (CA INDEX NAME)



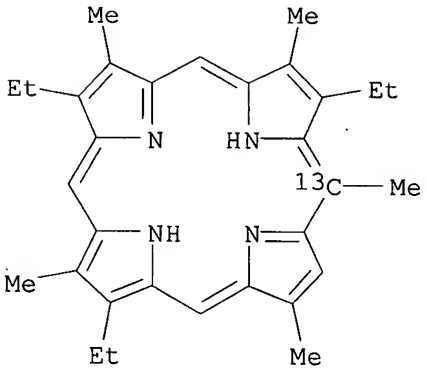
RN 96246-92-3 CAPLUS

CN 21H,23H-Porphine, 3,12,17-triethyl-2,8,13,18-tetramethyl-5-(methyl-13C)- (9CI) (CA INDEX NAME)

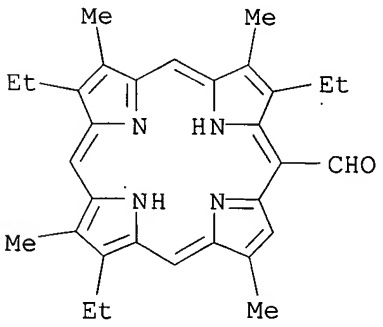


RN 96246-93-4 CAPLUS

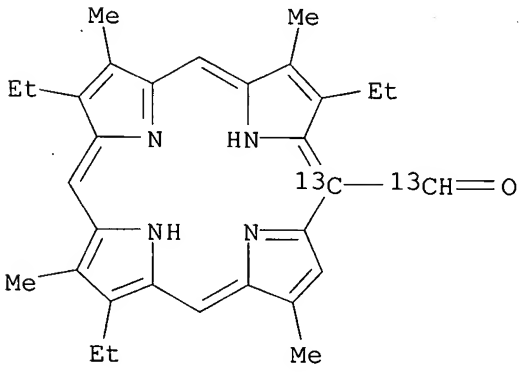
CN 21H,23H-Porphine-5-13C, 3,12,17-triethyl-2,5,8,13,18-pentamethyl- (9CI) (CA INDEX NAME)



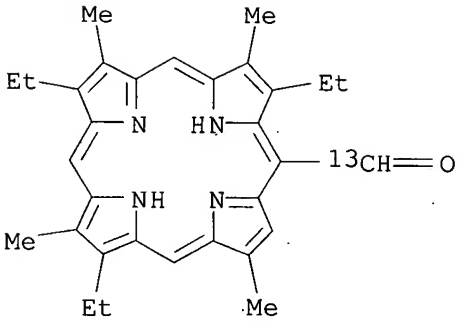
RN 96246-98-9 CAPLUS
CN 21H,23H-Porphine-5-carboxaldehyde, 3,12,17-triethyl-2,8,13,18-tetramethyl- (9CI) (CA INDEX NAME)



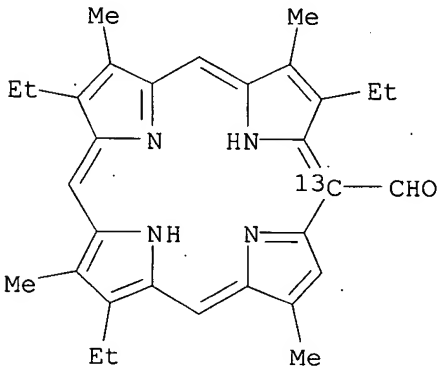
RN 96246-99-0 CAPLUS
CN 21H,23H-Porphine-5-13C-5-carboxaldehyde-13C, 3,12,17-triethyl-2,8,13,18-tetramethyl- (9CI) (CA INDEX NAME)



RN 96247-00-6 CAPLUS
CN 21H,23H-Porphine-5-carboxaldehyde-13C, 3,12,17-triethyl-2,8,13,18-tetramethyl- (9CI) (CA INDEX NAME)



RN 96247-01-7 CAPLUS
CN 21H,23H-Porphine-5-13C-5-carboxaldehyde, 3,12,17-triethyl-2,8,13,18-tetramethyl- (9CI) (CA INDEX NAME)



L12 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 1983:435662 CAPLUS
DN 99:35662
TI Fluoroimmunoassay system
IN Hendrix, John L.
PA Bio-Diagnostics, Inc., USA
SO Eur. Pat. Appl., 60 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 71991	A2	19830216	EP 1982-107102	19820806
	EP 71991	A3	19830907		
	EP 71991	B1	19860514		
	R: AT, DE, FR, GB, IT				
	CA 1186621	A1	19850507	CA 1982-408817	19820805
	AT 19828	T	19860515	AT 1982-107102	19820806
	AU 8287024	A	19830512	AU 1982-87024	19820810
	AU 565418	B2	19870917		
	JP 58086459	A	19830524	JP 1982-139112	19820810
	JP 03079665	B	19911219		
	AU 8774987	A	19871022	AU 1987-74987	19870630
PRAI	US 1981-291793	A	19810810		
	EP 1982-107102	A	19820806		

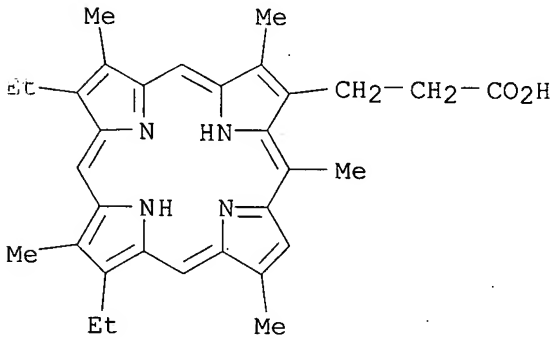
AB An automated computer-controlled apparatus and improved reagent for fluoroimmunoassays are described in which the analyte (e.g., antibody, antigen, hormone, hapten, virus, drug) is conjugated to a fluorescent label that has a relatively high Stokes shift (not <150 nm) and

fluoresces at wavelengths longer than those of autofluorescing substances in patient-serum samples (e.g., chlorophylls or porphyrins). The apparatus is relatively inexpensive, has simple optics, and includes an excitation light source, fiber optics, photodetectors, an analog-to-digital converter, and a display. The excitation light source is placed directly above the sample, such as a well in a microliter plate, and the light sensors are placed directly below the well. Thus, bacteriochlorophyllide b was purified from Rhodopseudomonas viridis by TLC and reversed-phase high-performance liquid chromatog., conjugated to T4 by using iso-Bu chloroformate in a solution of triethylamine and dioxane, and used for the determination of T4 in serum by an immunoassay procedure in anti-T4-coated test tubes.

IT 13939-70-3
RL: ANST (Analytical study)
(in fluorescent-labeled reagent, for automated fluoroimmunoassay)

RN 13939-70-3 CAPLUS

CN 21H,23H-Porphine-2-propanoic acid, 8,13-diethyl-3,7,12,17,20-pentamethyl- (9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1984:22483 CAPLUS

DN 100:22483

TI Manipulation of vinyl groups in protoporphyrin IX: introduction of deuterium and carbon-13 labels for spectroscopic studies

AU Smith, Kevin M.; Fujinari, Eugene M.; Langry, Kevin C.; Parish, Daniel W.; Tabba, Hani D.

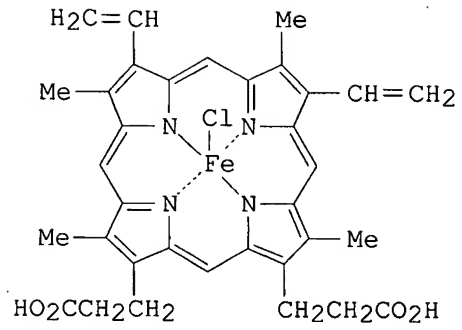
CS Dep. Chem., Univ. California, Davis, CA, 95616, USA

SO Journal of the American Chemical Society (1983), 105(22), 6638-46
CODEN: JACSAT; ISSN: 0002-7863

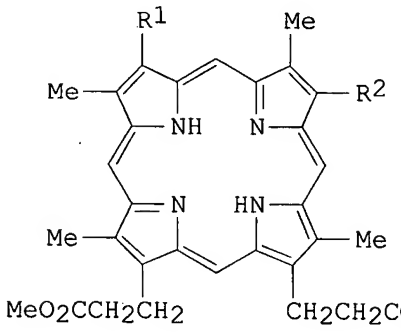
DT Journal

LA English

GI



I



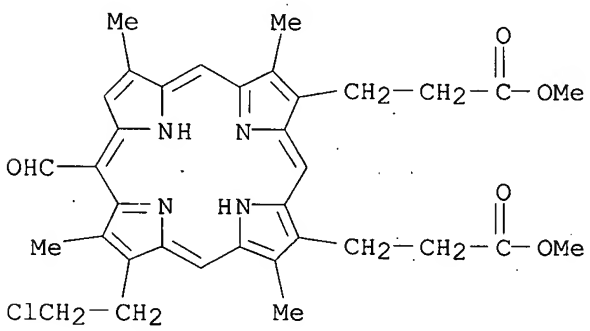
II

AB Using com. available hemin (I) as the starting material, routes for preparation of monovinyl deuterated (II, R1 = CH:CH2, R2 = CD:CD2), monovinyl carbon-13 enriched (II, R1 = CH:13CH2, R2 = CH:CH2; R1 = CH:CH2, R2 = CH:13CH2) (III) and divinyl carbon-13 enriched (II, R1 = R2 = CH:13CH2, 13CH:CH2) derivs. of protoporphyrin IX di-Me ester (II, R1 = R2 = CH:CH2) are described. The monovinyl carbon-13 enriched porphyrins III were obtained via Wittig reaction of Spirographis and iso-Spirographis porphyrin di-Me esters (II, R1 = CHO, R2 = CH:CH2; R1 = CH:CH2, R2 = CHO). A new efficient partial synthesis of Spirographis porphyrin di-Me ester II (R1 = CHO, R2 = CH:CH2) from deuteroporphyrin IX di-Me ester II (R1 = R2 = H) is reported in which the formyl group at C-2 is inserted by a Vilsmeier reaction using a hindered amide.

IT 87206-77-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 87206-77-7 CAPLUS

CN 21H,23H-Porphine-2,18-dipropanoic acid, 7-(2-chloroethyl)-10-formyl-3,8,13,17-tetramethyl-, dimethyl ester (9CI) (CA INDEX NAME)



L12 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1966:499353 CAPLUS

DN 65:99353
OREF 65:18585f-h,18586a-h,18587a-d
TI Chlorophyll and hemin. V. Acetylation and deacetylation of chlorin compounds
AU Inhoffen, Hans Herloff; Klotmann, Georg; Jeckel, Gisela
CS Tech. Hochsch., Brunswick, Germany
SO Justus Liebigs Annalen der Chemie (1966), 695, 112-32
CODEN: JLACBF; ISSN: 0075-4617
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB cf. CA 65, 18469b. The chlorophyll synthesis investigations of Strell, et al. (CA 54, 16464b) were critical examined The acetylation of 2-devinylisochlorin-e4 dimethyl ester (I) [as Cu(II) complex (II)] reported by Fischer, et al. (CA 42, 897i) was reworked and the simultaneous formation of the 2,6-di- and 2-monoacetyl derivs., III and IV (as Cu(II) complexes V and VI), established. At low temps., the isolation was effected of the 6-Ac (VII) derivative of I, also as Cu(II) complex (VIII). The acetylation and deacetylation equilibrium between II, V, VI, and VIII were determined under various conditions (temperature, time, concentration, and H2O content).

The position of the 6-Ac group in VIII was proved by a comparative N.M.R. investigation of the above compds. and their deuterated derivs. [Neutral Al2O3 (activity III) was used for column chromatography. Silica gel for column chromatography was treated with 36% HCl (0.5 l./8 l. gel), purified by frequent decantation with H2O, washed neutral, air-dried, and activated 4 hrs. at 140°. Silica gel G was used for thin layer chromatography (TLC), with CHCl3 as solvent. Ac2O was freed from AcOH by refluxing 6 hrs. with Mg turnings and distilling; the distillate b. 137° was collected. SnCl2 used contained 2 moles H2O of crystallization except where otherwise noted. Deuterioacetic acid was prepared from 102.09 g. Ac2O and 20.029 g. 98-9% D2O. Yields were based on the amts. reacted, without regard to the weight increase by the acetyl group.] By the procedure of F., et al. (loc. cit.), a solution of 300 mg. II (Strell and Kalojanoff, Angew. Chemical 66, 445(1954)) in 30 cc. Ac2O containing 3 g. ZnCl2 was heated 10 min. on a boiling water bath to give after work up a mixture of V + VI. Mixture V + VI in 5 cc. AcOH heated 10 min. at 50° with 5 cc. concentrated HCl, the solution poured into H2O and extracted with Et2O, the extract treated with CH2N2, washed neutral, and evaporated gave a residue which showed 2 fractions on TLC, which chromatographed on Al2O3 with CHCl3 gave 16 mg. IV, m. 247° (CHCl3-MeOH), and 80 mg. III, m. 262-4° (CHCl3-MeOH).

II (104 mg.) in 5 cc. Ac2O treated with 200 mg. finely powdered ZnCl2 at 100° (boiling water bath), let stand 1 min. at 100° under anhydrous conditions, immediately poured into ice H2O, and extracted with Et2O, the extract washed with H2O, treated with aqueous NH3, washed neutral with H2O, dried, and evaporated, and the product chromatographed on Al2O3 with 40:60 C6H6-CHCl gave 13 mg. II, 39 mg. VI, 15 mg. VIII, and 41 mg. V in this sequence. A warm solution of 270 mg. VIII in 15 cc. AcOH treated with 15 cc. 36% HCl, let stand 7 min. at .apprx.50°, cooled, dissolved in 350 cc. Et2O, adjusted to pH 4-5 with aqueous NH3, and washed with H2O to remove AcOH, the Et2O phase dried, treated with CH2N2, and evaporated, and the residue chromatographed on Al2O3 with CHCl3 gave first a small amount I (this arose in small measure by deacetylation of VIII) and then 250 mg. crude VII, which dissolved in a little hot CHCl3 and some Et2O and the solution treated with some hot MeOH gave crude VII, which (400 mg.) rechromatographed on Al2O3 with C6H6 and recrystd. as above gave VII, m. 179-80°. To 363 mg. II in 25 cc. Ac2O was added 1 g. SnCl2, the solution heated 3 min. at 100° treated dropwise during 5 min. with 5.3 cc. H2O with shaking and cooling so that the temperature remained at .apprx.100°, and worked up with Et2O, and the product chromatographed on Al2O3 with CHCl3 to give 356 mg. substance containing 335 mg. VI, identified by estimation of the extinction in the visible, by TLC

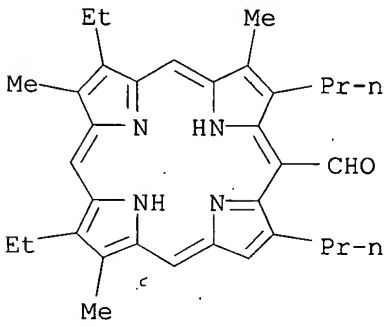
comparison with authentic VI, and by the m.p. of the demetallized compound (IV). $SnCl_2 \cdot 2H_2O$ (5 g.) treated 3 times with 25-cc. portions Ac_2O and the solid filtered off in vacuo at 100° and dried in vacuo 2 hrs. at 100° gave dehydrated $SnCl_2$ catalyst, which was used in the following experiment: completely anhydrous $SnCl_2$, which effected no reaction, was prepared from Sn foil and a stream of HCl at red heat. II (100 mg.) in 5 cc. Ac_2O heated 5 min. at 100° with 100 mg. above-prepared catalyst, cooled in ice, let stand 5 min. at room temperature, and worked up gave 91 mg. mixture of V + VI in the ratio 91.2:8.8; this indicated a shift of .apprx.10% in favor of V (previous ratio 80:20) toward a stronger H_2O-containing catalyst. Similar results were obtained with $SnCl_4$ or $BF_3.Et_2O$. A total of 2 g. mesochlorin-e6 was kept (in portions of 150 mg.) 2.5-3.0 min. at 220° in a Ag dish, worked up as described for mesoisochlorin-e4 di-Me ester (IX) (see below), and esterified with CH_2N_2 and the Cu complex purified by chromatography on silica gel with $CHCl_3$ gave 300 mg. Cu(II) complex (X) of mesophyllochlorin Me ester (XI), which in 5 cc. Ac_2O kept 20 min. at 20° with 200 mg. $SnCl_2$, worked up, and chromatographed on silica gel with $CHCl_3$ gave 148 mg. Cu(II) complex XII of 6-Ac derivative (XIII) of XI, which freed from Cu and reesterified with CH_2N_2 as described above gave XIII, m. 148°. XII (83 mg.) in 4 cc. AcOH heated to 100°, 100 mg. $SnCl_2$ added, the mixture heated 5 min. on a water bath and worked up immediately, and the product chromatographed on Al_2O_3 with $CHCl_3$ gave 22 mg. unchanged XII and 56 mg. X. Cu(II) complex (XIV) of IX (2 g.) in 60 cc. Ac_2O kept 20 min. at 60° with 400 mg. $SnCl_2$ and worked up and the product chromatographed on silica gel with tech. $CHCl_3$ gave 200 mg. unchanged XIV Cu(II) and 1.5 g. complex XV of 6-Ac derivative (XVI) of IX. Use of $SnCl_4$, $ZnCl_2$, and $BF_3.Et_2O$ even at various temps. (0-100°) gave a reaction product of similar composition (TLC). XV could not be obtained crystalline and showed therewith the same behavior as VIII. XV (86 mg.) in 4 cc. AcOH treated with 100 mg. $SnCl_2$ at 100° kept 5 min. at 100°, poured immediately into ice-H_2O, and worked up gave XIV. XV (1 g.) freed from Cu and reesterified with CH_2N_2 as above and the product chromatographed on Al_2O_3 with $CHCl_3$ gave XVI, m. 201-2° ($CHCl_3$-Et_2O-MeOH). Crude chlorin-e6 (3 g.) in 500 cc. Me_2CO hydrogenated over 1.5 g. 10% Pd-C (1 mole H/1 mole compound absorbed in 2 hrs.) and the product heated 2 min. at .apprx.60° with $Cu(OAc)_2$ in Me_2CO-MeOH containing 2 cc. AcOH gave after purification with $CHCl_3$-H_2O 2.4 g. crude Cu(II) complex XVII of mesochlorin-e6 (XVIII). Crude XVII (0.5 g.) in 25 cc. AcOH heated 5 min. at 100° and worked up and the product esterified with CH_2N_2 and chromatographed on silica gel with $CHCl_3$ gave 245 g. Cu(II) complex XIX of IX. Removal of Cu from XIX, followed by reesterification with CH_2N_2, gave IX, m. 206°. From crude chlorin-e6 was prepared with $Cu(OAc)_2$ in MeOH-Me_2CO 800 mg. Cu(II) complex of chlorin-e6, which in 100 cc. AcOH heated 10 min. at 100° and worked up with $CHCl_3$ and the product esterified with CH_2N_2 and chromatographed on silica gel with $CHCl_3$ gave 240 mg. Cu(II) complex of isochlorin-e4 di-Me ester. Crude chlorin-e6 in 3.5 l. Et_2O esterified with CH_2N_2 and the product (5.6 g.) chromatographed on Al_2O_3 with $CHCl_3$ gave 2.7 g. chlorin-e6 tri-Me ester, m. 212° which hydrogenated .apprx.1 hr. in 400 cc. Me_2CO over 300 mg. Pd and the crude product chromatographed on Al_2O_3 with $CHCl_3$ gave 2 g. XVIII tri-Me ester (XX), m. 182° (Me_2CO-MeOH). A hot solution of 2 g. XX in 40 cc. Me_2CO treated with 250 cc. boiling MeOH saturated with $Cu(OAc)_2$ and after 5 min. the solution cooled and poured into Et_2O gave Cu(II) complex (XXI) of XX. The common Friedel-Crafts reagents could not be used in the acetylation of XX because of complex formation. Neither XX nor XXI reacted with Ac_2O alone after 1 hr. at 100°. No reaction occurred in Ac_2O with 0.04 or 1 cc. $BF_3.Et_2O$ during 75 min. at 100°. With 100% H_2SO_4 and Ac_2O, only starting product was recovered after 10 min. at 0°. Heating 5 min. at .apprx.40° led to partial destruction of the chlorin. XXI was not acetylated with $SnCl_2$ or $BF_3.Et_2O$ after 15 min. at 100°. With BF_3. Et_2O, a stable addition compound was probably formed with the catalyst. After removal of Cu, XX was obtained. To a solution of 400 mg. XX in 30 cc.

C5H5N was added 0.5 g. SnCl2 in 3 cc. C5H5N, after 30 min. the blue solution poured into Et2O, C5H5N removed with 2N HCl, and the product isolated and chromatographed on Al2O3 with 100:1 CHCl3-MeOH gave homogeneous (TLC with 100:1 CHCl3-MeOH) Sn(IV) complex of XX. Similarly was prepared Sn(IV) complex of I. Pertinent visible, ir, N.M.R., and mass spectral data were given.

IT 15664-50-3
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 15664-50-3 CAPLUS

CN 21H,23H-Porphine-15-carboxaldehyde, 3,8-diethyl-2,7,12-trimethyl-13,17-dipropyl- (9CI) (CA INDEX NAME)

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=> s l12 and nonmetal?
L13           8 S L12
          29345 NONMETAL?
L14           0 L13 AND NONMETAL?

=> s l13 and non metal?
         903161 NON
        2578268 METAL?
           7179 NON METAL?
                  (NON(W)METAL?)
L15           0 L13 AND NON METAL?
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=>
=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                        70.20     576.88

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                        -6.24     -27.30

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FILE 'USPATFULL' ENTERED AT 14:25:38 ON 14 SEP 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s non metal? (4a) porphyrin
L16          56 NON METAL? (4A) PORPHYRIN

=> s l16 and label?
L17          20 L16 AND LABEL?

=> s l17 and pyrrole
L18          16 L17 AND PYRROLE

=> dup rem l18
PROCESSING COMPLETED FOR L18
L19          16 DUP REM L18 (0 DUPLICATES REMOVED)

=> d l19 bib abs 1-16

L19  ANSWER 1 OF 16  USPATFULL on STN
AN     2006:202424  USPATFULL
TI     Labeling reagents and labeled targets comprising
       nonmetallic porphyrins
IN     Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
       Rabbani, Elazar, New York, NY, UNITED STATES
PA     Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., New York, NY, UNITED
       STATES (U.S. corporation)
PI     US 2006172308       A1  20060803
AI     US 2004-763088      A1  20040122 (10)
RLI    Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT     Utility
FS     APPLICATION
LREP   ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022,
       US
CLMN   Number of Claims: 19
ECL    Exemplary Claim: 1
DRWN   15 Drawing Page(s)
LN.CNT 3541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 2 OF 16 USPATFULL on STN
AN 2006:40616 USPATFULL
TI Processes for incorporating nucleic acid sequences into an analyte or library of analytes
IN Rabbani, Elazar, New York, NY, UNITED STATES
Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Donegan, James J., Long Beach, NY, UNITED STATES
Coleman, Jack, East Northport, NY, UNITED STATES
Liu, Dakai, Islip, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES (U.S. corporation)
PI US 2006035264 A1 20060216
AI US 2005-237466 A1 20050927 (11)
RLI Division of Ser. No. US 2002-96076, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022, US
CLMN Number of Claims: 69
ECL Exemplary Claim: 1-413
DRWN 15 Drawing Page(s)
LN.CNT 4099
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for compositions for use in real time nucleic acid detection processes. Such real time nucleic acid detection processes are carried out with energy transfer elements attached to nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid binding agents. Real time nucleic acid detection allows for the qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 3 OF 16 USPATFULL on STN
AN 2006:34199 USPATFULL
TI Processes for quantitative or qualitative detection of single-stranded or double-stranded nucleic acids
IN Rabbani, Elazar, New York, NY, UNITED STATES
Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Donegan, James J., Long Beach, NY, UNITED STATES
Coleman, Jack, East Northport, NY, UNITED STATES
Liu, Dakai, Islip, NY, UNITED STATES
PI US 2006029968 A1 20060209
AI US 2005-235516 A1 20050926 (11)
RLI Division of Ser. No. US 2002-96076, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022, US

CLMN Number of Claims: 275
ECL Exemplary Claim: 1-33
DRWN 15 Drawing Page(s)
LN.CNT 5182
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for compositions for use in real time nucleic acid detection processes. Such real time nucleic acid detection processes are carried out with energy transfer elements attached to nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid binding agents. Real time nucleic acid detection allows for the qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 4 OF 16 USPATFULL on STN
AN 2006:27907 USPATFULL
TI Site- or sequence-specific process for cleaving analytes and library of analytes
IN Rabbani, Elazar, New York, NY, UNITED STATES
Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Donegan, James J., Long Beach, NY, UNITED STATES
Coleman, Jack, East Northport, NY, UNITED STATES
Liu, Dakai, Islip, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES (U.S. corporation)
PI US 2006024738 A1 20060202
AI US 2005-237467 A1 20050927 (11)
RLI Division of Ser. No. US 2002-96076, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022, US
CLMN Number of Claims: 555
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 6144
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for compositions for use in real time nucleic acid detection processes. Such real time nucleic acid detection processes are carried out with energy transfer elements attached to nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid binding agents. Real time nucleic acid detection allows for the qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 5 OF 16 USPATFULL on STN
AN 2006:27906 USPATFULL
TI Process for removal of homopolymeric sequence portion from analyte(s) and library of analytes
IN Babbani, Elazar, New york, NY, UNITED STATES
Stavrianopoulos, Jannis G., Baysnore, NY, UNITED STATES
Donegan, James J., Long Beach, NY, UNITED STATES

Coleman, Jack, East Northport, NY, UNITED STATES
Liu, Dakai, Islip, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES (U.S. corporation)
PI US 2006024737 A1 20060202
AI US 2005-237442 A1 20050927 (11)
RLI Division of Ser. No. US 2002-96076, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022, US
CLMN Number of Claims: 17
ECL Exemplary Claim: 1-527
DRWN 15 Drawing Page(s)
LN.CNT 3943
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for compositions for use in real time nucleic acid detection processes. Such real time nucleic acid detection processes are carried out with energy transfer elements attached to nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid binding agents. Real time nucleic acid detection allows for the qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 6 OF 16 USPATFULL on STN
AN 2006:27904 USPATFULL
TI Chimeric nucleic acid constructs and compositions comprising sets of nucleic acid constructs
IN Rabbani, Elazar, New York, NY, UNITED STATES
Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Donegan, James J., Long Beach, NY, UNITED STATES
Coleman, Jack, East Northport, NY, UNITED STATES
Liu, Dakai, Lslip, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES (U.S. corporation)
PI US 2006024735 A1 20060202
AI US 2005-236151 A1 20050927 (11)
RLI Division of Ser. No. US 2002-96076, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022, US
CLMN Number of Claims: 52
ECL Exemplary Claim: 1-404
DRWN 15 Drawing Page(s)
LN.CNT 4013
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for compositions for use in real time nucleic acid detection processes. Such real time nucleic acid detection processes are carried out with energy transfer elements attached to nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid binding agents. Real time nucleic acid detection allows for the qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 7 OF 16 USPATFULL on STN
AN 2005:159178 USPATFULL
TI Real-time nucleic acid detection processes and compositions
IN Rabbani, Elazar, New York, NY, UNITED STATES
Stavrianopoulos, Jannis G., Baysnore, NY, UNITED STATES
Donegan, James J., Long Beach, NY, UNITED STATES
Coleman, Jack, East Northport, NY, UNITED STATES
Liu, Dakai, Islip, NY, UNITED STATES
PI US 2005137388 A1 20050623
AI US 2002-96076 A1 20020312 (10)
DT Utility
FS APPLICATION
LREP ENZO BIOCHEM, INC., 527 MADISON AVENUE (9TH FLOOR), NEW YORK, NY, 10022, US
CLMN Number of Claims: 542
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 6158
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for compositions for use in real time nucleic acid detection processes. Such real time nucleic acid detection processes are carried out with energy transfer elements attached to nucleic acid primers, nucleotides, nucleic acid probes or nucleic acid binding agents. Real time nucleic acid detection allows for the qualitative or quantitative detection or determination of single-stranded or double-stranded nucleic acids of interest in a sample. Other processes are provided by this invention including processes for removing a portion of a homopolymeric sequence, e.g., poly A sequence or tail, from an analyte or library of analytes. Compositions useful in carrying out such removal processes are also described and provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 8 OF 16 USPATFULL on STN
AN 2005:5243 USPATFULL
TI Novel chemiluminescent reagents
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, 10022 (U.S. corporation)
PI US 2005004350 A1 20050106
US 7256299 B2 20070814
AI US 2004-764388 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 17
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3601
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 9 OF 16 USPATFULL on STN
AN 2004:321700 USPATFULL
TI Labeling reagents comprising aphenylic analogs of rhodamine dyes
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY (U.S. corporation)
PI US 2004254355 A1 20041216
US 7256291 B2 20070814
AI US 2004-763076 A1 20040122 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4545
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 10 OF 16 USPATFULL on STN
AN 2004:292946 USPATFULL
TI Heterodimeric dye composition
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabban, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES, 10022 (U.S. corporation)
PI US 2004230036 A1 20041118
AI US 2004-764389 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 11 OF 16 USPATFULL on STN
AN 2004:292164 USPATFULL
TI Novel dye labeling composition
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, 10022 (U.S. corporation)
PI US 2004229248 A1 20041118
US 6949659 B2 20050927
AI US 2004-764393 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue, 9th Floor, New York, NY, 10022-4304
CLMN Number of Claims: 4
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3537
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 12 OF 16 USPATFULL on STN
AN 2004:260541 USPATFULL
TI Process for preparing novel cyanine dye labeling reagents
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbam, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, 10022 (U.S. corporation)
PI US 2004203038 A1 20041014
US 7241897 B2 20070710
AI US 2004-761906 A1 20040121 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 15
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3584
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 13 OF 16 USPATFULL on STN
AN 2004:248291 USPATFULL
TI Process for detecting the presence or quantity of enzymatic activity in a sample

IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES, 10022 (U.S. corporation)
PI US 2004192893 A1 20040930
AI US 2004-764417 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 36
ECL Exemplary Claim: CLM-1-286
DRWN 15 Drawing Page(s)
LN.CNT 3665
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 14 OF 16 USPATFULL on STN
AN 2004:228200 USPATFULL
TI Process for detecting the presence or quantity of enzymatic activity in a sample
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES
Rabbani, Elazar, New York, NY, UNITED STATES
PA Enzo Life Sciences, Inc., New York, NY, UNITED STATES (U.S. corporation)
PI US 2004176586 A1 20040909
US 7163796 B2 20070116
AI US 2004-764418 A1 20040123 (10)
RLI Division of Ser. No. US 2002-96075, filed on 12 Mar 2002, PENDING
DT Utility
FS APPLICATION
LREP Ronald C. Fedus, Esq., Enzo Life Sciences, Inc., c/o Enzo Biochem, Inc., 527 Madison Avenue (9th Floor), New York, NY, 10022-4304
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4543
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 15 OF 16 USPATFULL on STN
AN 2003:319498 USPATFULL
TI Labeling reagents and labeled targets, target labeling processes and other processes for using same in nucleic acid determinations and analyses
IN Stavrianopoulos, Jannis G., Bayshore, NY, UNITED STATES

Rabbani, Elazar, New York, NY, UNITED STATES
PI US 2003225247 A1 20031204
US 7166478 B2 20070123
AI US 2002-96075 A1 20020312 (10)
DT Utility
FS APPLICATION
LREP ENZO LIFE SCIENCES, INC., c/o ENZO BIOCHEM, INC., 527 Madison Avenue, 9th Floor, New York, NY, 10022
CLMN Number of Claims: 286
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 4499
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides for labeling reagents, labeled targets and processes for preparing labeling reagents. The labeling reagents can take the form of cyanine dyes, xanthene dyes, porphyrin dyes, coumarin dyes or composite dyes. These labeling reagents are useful for labeling probes or targets, including nucleic acids and proteins. These reagents can be usefully applied to protein and nucleic acid probe based assays. They are also applicable to real-time detection processes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L19 ANSWER 16 OF 16 USPATFULL on STN
AN 93:102783 USPATFULL
TI Derivatives of porphyrin and metalloporphyrins optionally coupled to a biologically active molecule and pharmaceutical composition containing them
IN Mauclaire, Laurent, Paris, France
Bedel, Catherine, Lacroix St. Ouen, France
Pereyre, Michel, Talence, France
Saccavini, Jean-Claude, Verrieres le Buisson, France
PA CIS bio International, Saclay, France (non-U.S. corporation)
PI US 5268371 19931207
AI US 1992-943299 19920910 (7)
PRAI FR 1990-214 19900110
DT Utility
FS Granted
EXNAM Primary Examiner: Ivy, C. Warren; Assistant Examiner: Turnipseed, James H.
LREP Meller, Michael N.
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 625
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to metallized porphyrin derivatives having the formula: ##STR1## wherein the R and M variables are as defined in the specification. Said porphyrin derivatives having uses as antitumor agents, diagnostics agents, or in therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.